

CLAIMS

What is claimed is:

1. A method for selecting and manipulating multiple objects, comprising:

5 receiving information for the selection of two or more objects in a document;

displaying highlight objects that correspond to the two or more objects, wherein the highlight objects provide visual feedback to indicate the selection of each of the two or more objects; and

10 displaying a multiple selection highlight object that corresponds to the highlight objects, wherein the multiple selection highlight object at least partially bounds the highlight objects to provide visual feedback of the multiple selection of the two or more objects,

15 wherein the highlight objects are automatically configured to be manipulated according to the manipulation of the multiple selection highlight object until at least one of the two or more objects are deselected, at which point each of the two or more objects can be individually manipulated.

2. The method of claim 1, wherein receiving information for the selection of two or more objects comprises receiving information based on one of a continuous selection of all of the two or more objects or an individual selection of each of the two or more objects.

20 3. The method of claim 1, wherein creating highlight objects that correspond to the two or more objects comprises creating outlines that each at least partially bound one of the two or more objects and add emphasis to the appearance of the two or more objects.

4. The method of claim 1, wherein creating a multiple selection highlight object that corresponds to the highlight objects comprises creating an outline that at least partially bounds the highlight objects, wherein the outline comprises at least one of:

5 at least one rotation handle that can be manipulated to cause the rotation of the multiple selection highlight object and the highlight objects;

at least one selection handle that can be manipulated to cause the resizing of the multiple selection highlight object and the highlight objects; and

at least one axis pin that can be positioned to provide an axial reference point for the
10 manipulation of the two or more objects.

5. The method of claim 1, further comprising:

detecting a rotative manipulation of the multiple selection highlight object; and

displaying the highlight objects and the multiple selection highlight object in a rotated

15 orientation corresponding to the rotative manipulation of the multiple selection highlight object.

6. The method of claim 4, further comprising:

displaying the multiple selection highlight object with the axis pin visible in response to a positioning of the user interface in a vicinity of the rotation handle;

detecting a positioning of the axis pin;

5 detecting an engagement and manipulation of the rotation handle by the user interface;

periodically displaying the highlight objects and the multiple selection highlight object in a temporary rotated orientation relative to the positioning of the axis pin and the manipulation of the rotation handle until the rotation handle is disengaged by the user interface; and

10 displaying the highlight objects and the multiple selection highlight object in a permanently rotated orientation relative to the positioning of the axis pin and corresponding to the manipulation of the rotation handle before it is disengaged by the user interface.

7. The method of claim 4, further comprising:

detecting an input of a flip command for the two or more objects; and

15 displaying the highlight objects and the multiple selection highlight object in a position that is flipped relative to a position of the axis pin in accordance with the flip command.

8. The method of claim 4, further comprising:

displaying the multiple selection highlight object with the axis pin visible in response to a positioning of the user interface in a vicinity of the rotation handle;

detecting a positioning of the axis pin;

5 detecting an input of a flip command for the two or more objects; and

displaying the highlight objects and the multiple selection highlight object in a position that is flipped relative to the positioning of the axis pin in accordance with the flip command.

9. The method of claim 4, further comprising:

10 detecting a manipulation of the selection handle; and

displaying the highlight objects and the multiple selection highlight object with one or more of their dimensions modified relative to the manipulation of the selection handle.

10. The method of claim 4, further comprising:

detecting an engagement and manipulation of the selection handle by a user interface;

periodically displaying the highlight objects and the multiple selection highlight object with one or more of their dimensions temporarily modified relative to the manipulation of the selection handle until the selection handle is disengaged by the user interface; and

displaying the highlight objects and the multiple selection highlight object with one or more of their dimensions permanently modified corresponding to the manipulation of the selection handle before it is disengaged by the user interface.

11. The method of claim 1, further comprising:

detecting the deselection of at least one of the two or more objects; and

displaying the two or more objects with an appearance that corresponds to previous manipulations of the multiple selection highlight object.

12. A computer system for selecting and manipulating multiple objects, comprising:
a processing unit;
a memory in communication with the processing unit;
a user interface in communication with the processing unit;
5 a display device in communication with the processing unit; and
a computer program stored in the memory that provides instructions to the processing
unit, wherein the processing unit is responsive to the instructions, operable for:
receiving information from the user interface to select two or more objects
displayed on the display device;
10 creating highlight objects that correspond to the two or more objects, wherein the
highlight objects provide visual feedback to indicate the selection of each of the two or
more objects;
creating a multiple selection highlight object that corresponds to the highlight
objects, wherein the multiple selection highlight object at least partially bounds the
15 highlight objects to provide visual feedback of the multiple selection of the two or more
objects; and
rendering the highlight objects and the multiple selection highlight object to the
display device to provide visual feedback of the multiple selection of the two or more
objects, wherein the highlight objects are automatically configured to be manipulated
20 according to the manipulation of the multiple selection highlight object until at least one
of the two or more objects are deselected, at which point each of the two or more objects
can be individually manipulated.

13. The computer system of claim 12, wherein the processing unit, responsive to the instructions, is operable for creating a multiple selection highlight object by creating an outline that at least partially bounds the highlight objects and comprises at least one of:

at least one rotation handle that can be manipulated to cause the rotation of the multiple selection highlight object and the highlight objects;

at least one selection handle that can be manipulated to cause the resizing of the multiple selection highlight object and the highlight objects; and

at least one axis pin that can be positioned to provide an axial reference point for the manipulation of the two or more objects.

14. The computer system of claim 13, wherein the processing unit, responsive to the instructions, is further operable for:

rendering the multiple selection highlight object with the axis pin to the display device in response to a positioning of the user interface in a vicinity of the rotation handle;

detecting a positioning of the axis pin by the user interface;

detecting an engagement and manipulation of the rotation handle by the user interface; and

rendering the highlight objects and the multiple selection highlight object to the display device in a rotated orientation relative to the positioning of the axis pin and corresponding to the manipulation of the rotation handle.

15. The computer system of claim 13, wherein the processing unit, responsive to the instructions, is further operable for:

rendering the multiple selection highlight object with the axis pin to the display device in response to a positioning of the user interface in a vicinity of the rotation handle;

5 detecting a positioning of the axis pin by the user interface;

detecting the input of a flip command for the two or more objects via the user interface;
and

rendering the highlight objects and the multiple selection highlight object to the display device in a position that is flipped relative to the positioning of the axis pin in accordance with
10 the flip command.

16. The computer system of claim 13, wherein the processing unit, responsive to the instructions, is further operable for:

detecting an engagement and manipulation of the selection handle by the user interface;

and

5 rendering the highlight objects and the multiple selection highlight object to the display device with one or more of their dimensions modified corresponding to the manipulation of the selection handle before it is disengaged by the user interface.

17. The computer system of claim 13, wherein the processing unit, responsive to the instructions, is further operable for:

10 detecting the deselection of at least one of the two or more objects by the user interface;

and

rendering the two or more objects to the display device with an appearance that corresponds to previous manipulations of the multiple selection highlight object.

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18. A computer-readable medium having computer-executable instructions for selecting and manipulating multiple objects, comprising:

logic for receiving information for the selection of a first object displayed in a graphical user interface;

5 logic for creating a first highlight object that provides visual feedback to indicate the selection of the first object;

logic for receiving information for the selection of a second object displayed in the graphical user interface;

10 logic for creating a second highlight object that provides visual feedback to indicate the selection of the second object;

logic for creating a multiple selection highlight object that at least partially bounds the first highlight object and the second highlight object to provide visual feedback of the multiple selection of the first object and the second object;

15 logic for aligning the multiple selection object to an orientation of the first highlight object; and

logic for displaying the first highlight object, the second highlight object, and the multiple selection highlight object in the graphical user interface to provide visual feedback of the multiple selection of the first object and the second object.

19. The computer-readable medium of claim 18, further comprising:

logic for detecting a manipulation of the multiple selection highlight object relative to a single dimension;

logic for proportionately resizing two or more dimensions of the first highlight object in
5 correspondence with the manipulation of the multiple selection highlight object when the first highlight object is not aligned with the orientation of the multiple selection highlight object, thereby reducing distortion of the shape of the object when it is resized; and

logic for rendering the first highlight object, the second highlight object, and the multiple selection highlight object to the graphical user interface with one or more of their dimensions
10 modified in correspondence with the manipulation of the multiple selection highlight object.

20. A computer-implemented method for selecting and manipulating multiple objects, comprising:

automatically associating two or more objects to a common reference object in response to a selection of the two or more objects;

5 causing a manipulation of the two or more objects in response to making the manipulation to the common reference object; and

automatically disassociating the two or more objects from the common reference object in response to a deselection of at least one of the two or more objects.

10 21. The computer-implemented method of claim 20, wherein automatically associating two or more objects to a common reference object comprises aligning the common reference object to the orientation of at least one of the two or more objects.

15 22. The computer-implemented method of claim 20, wherein causing a manipulation of the two or more objects comprises causing at least one of rotating, flipping, or resizing the two or more objects in response to making the manipulation to the common reference object.

23. The computer-implemented method of claim 20, further comprising establishing a common reference point with respect to the common reference object, wherein the common reference point is repositionable, and the two or more objects are manipulable with respect to the common reference point.

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24. The method of claim 20, wherein causing a manipulation of the two or more objects comprises proportionately modifying two or more dimensions of each of the two or more objects that is not in alignment with the common reference object in response to a modification of one dimension of the common reference object.